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EXAMINER

DUONG, THOI V

ART UNIT	PAPER NUMBER
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2871

DATE MAILED: 05/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/934,699

Applicant(s)

OKAMOTO ET AL.

Examiner

Thoi V. Duong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11, 16-19, 21-27 and 34-51 ~~is/are~~ pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11, 16-19, 21-27 and 34-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the response filed March 03, 2006.

Claims 12-15, 20 and 28-33 were cancelled, and claims 1-11, 16-19, 21-27 and 34-51 are currently are pending in this application.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 4-11, 21, 22, 34 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priestman et al. (Priestman, USPN 6,812,954 B1) in view of Nakai et al. (Nakai, USPN 6,072,454) and Yamazaki (USPN 6,037,635).

Re claims 1, 2, 34 and 35, as shown in Fig. 4, Priestman discloses a portable electronic device (cellular phone) comprising:

a cover member 204 comprising a first liquid crystal display panel 226 for displaying an image (col. 8, lines 39-43); and

a second liquid crystal display panel 220 comprising a touch input operation (col. 8, lines 1-9 and lines 65-66),

wherein the cover member comprising the first display panel 226 and the second display panel 220 are attached to each other via a hinge mechanism 206 in a longitudinal direction so as to allow opening and closing.

Priestman discloses a portable electronic device that is basically the same as that recited in claims 1, 2, 34 and 35 except that Priestman does not disclose that the second display device and the first display device are active matrix displays.

At first, Nakai discloses that main liquid crystal display devices are of the active matrix type excelling in display performance (col. 2, lines 56-60). Nakai also shows in Fig. 4 a display device which is applicable to portable electronic equipment (col. 1, lines 13-20).

Further, as shown in Figs. 4A-4F, Yamazaki discloses a portable electronic device comprising a liquid crystal display device, wherein the liquid crystal display device may be an active matrix type EL display (col. 6, lines 51-59).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the portable electronic device of Priestman by employing an EL display of Yamazaki for the first display device and an active matrix display of Nakai for the second display device so as to obtain a downsized and lightened device having high image quality and high reliability without consuming much power (Nakai, col. 4, lines 1-5 and Yamazaki, col. 6, lines 51-59).

Re claims 4 and 5, Priestman discloses that the first display panel 226 comprises a touch input operation portion (col. 8, lines 65-66).

Re claims 6 and 7, Priestman discloses that the second display panel 220 displays one of a character, a symbol, and buttons (col. 8, line 66 through col. 9, line 5).

Re claims 8 and 9, Priestman discloses that the second display panel 220 comprises an image pickup device 222 (CCD video camera).

Re claims 10 and 11, Priestman discloses that one of the first display device and the second display device comprises a system 222 for identifying a user (col. 8, lines 54-64).

Re claims 21 and 22, Priestman discloses that the portable electronic device comprises audio portions 224, 228 as a communication function (col. 9, lines 18-30).

4. Claims 3 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priestman et al. (Priestman, USPN 6,812,954 B1) in view of Nakai et al. (Nakai, USPN 6,072,454) and Yamazaki (USPN 6,037,635) as applied to claims 1, 2, 4-11, 21, 22, 34 and 35 above and further in view of Mack II et al. (USPN 6,510,325 B1).

The portable electronic device of Priestman as modified in view of Nakai above includes all that is recited in claims 3 and 16-18 except for a third display device comprising an image pickup device and a system for identifying a user.

Re claim 3, as shown in Figs. 2D, 3A and 3B, Mack II et al. discloses a portable electronic device comprising:

- a first display panel 6 in front of an upper segment 9 (Fig. 3A);
- a second display panel 43 (touch pad) in a base segment 8; and
- a third display panel 20 provided between the first display device 6 and the second display device 43 (in back of the upper segment 9 in Fig. 3B),

wherein, re claims 16 and 17, the third display panel comprises an image pickup device 21 or a system for identifying a user 21 (col. 6, lines 49-52); and

wherein, re claim 18, the third display panel is a liquid crystal display device (col. 6, lines 34-52).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the device of Priestman with the teaching of Mack II et al. by forming a third display device comprising an image pickup device or a system for identifying a user so as to obtain a full function video phone (col. 6, lines 43-52).

5. Claims 19 and 23 are rejected under 35 U.S.C. 102(b) being unpatentable by Priestman et al. (Priestman, USPN 6,812,954 B1) in view of Yamazaki (USPN 6,037,635) and Gale et al. (Gale, USPN 6,452,577 B1).

Re claim 19, as shown in Fig. 4, Priestman discloses a portable electronic device (cellular phone) comprising:

a cover member 204 comprising a first liquid crystal display panel 226 for displaying an image (col. 8, lines 39-43); and

a second liquid crystal display panel 220 comprising a touch input operation (col. 8, lines 1-9 and lines 65-66),

wherein the cover member comprising the first display panel 226 and the second display panel 220 are attached to each other via a hinge mechanism 206 so as to allow opening and closing; and

wherein, re claim 23, the portable electronic device comprises a communication function 224, 228.

Priestman discloses a portable electronic device that is basically the same as that recited in claim 19 except for a first liquid crystal display panel being an active matrix EL display panel for displaying an image and a second liquid crystal display

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panel being a reflection display panel, wherein the reflection display is made to display by irradiating light emitted from the active matrix EL display device.

At first, as shown in Figs. 4A-4F, Yamazaki discloses a portable electronic device comprising a liquid crystal display device, wherein the liquid crystal display device may be a reflection display type or an active matrix type EL display (col. 6, lines 51-59).

Thus, it is obvious that the active matrix type EL display of Yamazaki can be applied to the first liquid crystal display panel of Priestman and a reflection display type display panel of Yamazaki can be applied to the second liquid crystal panel of Priestman to pursue a low power consumption or a downsized and lightened device (col. 6, lines 51-59).

Further, as shown in Figs. 1 and 2, Gale discloses a portable electronic device (col. 1, lines 12-23) comprising:

a cover member 12 comprising an active matrix display panel 22 (microdisplay) for displaying an image (col. 3, lines 1-20); and

a reflection display panel 18, the reflection display is made to display by irradiating light emitted from the active matrix display panel 22.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the portable electronic device of Priestman with the teaching Gale by irradiating light emitted from the active matrix EL display device onto the reflection display to produce an image which is viewable by a user at a greater distance (col. 1, lines 26-31).

6. Claims 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priestman et al. (Priestman, USPN 6,812,954 B1) in view of Yamazaki (USPN 6,037,635).

Re claim 24, as shown in Fig. 4, Priestman discloses a portable electronic device comprising:

a first liquid crystal display panel 226; and

a second liquid crystal panel 220,

wherein the first liquid crystal display panel 226 and the second liquid crystal display panel are attached to each other so as to allow opening and closing.

However, Priestman does not disclose that the second liquid crystal display panel is an active matrix EL display panel.

As shown in Fig. 4D, Yamazaki discloses a portable telephone comprising a liquid crystal display device 2304, wherein the display device may be a flat panel such as an active matrix EL display (col. 6, lines 58-59).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the portable electronic device of Priestman by employing the active matrix EL display of Yamazaki for the second liquid crystal display panel so as to obtain a downsized and lightened device with a low power consumption (Yamazaki, col. 6, lines 51-59).

wherein, re claim 25, Priestman discloses that the second liquid crystal display panel 220 comprises a touch input operational portion (col. 8, lines 65-66);

wherein, re claim 26, Priestman discloses that the second liquid crystal display panel display an image (col. 8, lines 1-9); and

wherein, re claim 27, Priestman discloses that the second liquid crystal display panel comprises an image pickup device 222 (col. 5, lines 27-28).

7. Claims 36-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Priestman et al. (Priestman, USPN 6,812,954 B1) in view of Nakai et al. (Nakai, USPN 6,072,454) and Zavracky et al. (Zavracky, Pub. No. US 2002/0158823 A1).

Re claims 36 and 44, as shown in Fig. 4, Priestman discloses a portable electronic device (cellular phone) comprising:

a first liquid crystal display device 226 for displaying an image (col. 8, lines 39-43); and

a second liquid crystal display device 220 comprising a touch input operation (col. 8, lines 1-9 and lines 65-66),

wherein the first display device 226 and the second display device 220 are attached to each other (via a hinge mechanism 206).

Priestman discloses a portable electronic device that is basically the same as that recited in claims 36 and 44 except that Priestman does not disclose that the second display device and the first display device are active matrix displays, wherein the first display device has a higher resolution than that of the second display device.

At first, Nakai discloses that main liquid crystal display devices are of the active matrix type excelling in display performance (col. 2, lines 56-60). Nakai also shows in

Fig. 4 a display device which is applicable to portable electronic equipment (col. 1, lines 13-20).

Further, as shown in Fig. 21E, Zavracky discloses a portable electronic device 870 (hand held display device) comprising a first display device 880 (active matrix microdisplay) and a second display device 872 (flat panel display), wherein the first display device 880 has a higher resolution than that of the second display device 872 (paragraphs 257, 276 and 278).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the first display device and the second display device of the portable electronic device of Priestman by employing active matrix displays as taught by Nakai and Zavracky to obtain high image quality and high reliability without consuming much power (Nakai, col. 4, lines 1-5 and Zavracky, paragraph 257), wherein the first display device has a high resolution for displaying text and graphics and the second display device has a lower resolution for displaying simple numeric and/or alphabetic display to read telephone numbers or scrolled numbers or messages (Zavracky, paragraph 278).

Re claims 39 and 47, Priestman discloses that the second display panel 220 displays one of a character, a symbol, and buttons (col. 8, line 66 through col. 9, line 5);

Re claims 40 and 48, Priestman discloses that the portable electronic device comprises audio portions 224, 228 as a communication function (col. 9, lines 18-30);

Re claims 41 and 49, Priestman discloses that a screen of the second display device 220 is switched to various input keys displayed on the display device since the

display device can be used as a man machine interface (col. 8, line 66 through col. 9, line 5).

Re claims 43 and 51, Priestman discloses that the portable electronic device is a mobile telephone as shown in Fig. 4.

Re claims 37, 38, 45 and 46, Nakai discloses that the TFT may be formed of a semiconductor layer of polysilicon or a semiconductor layer of amorphous silicon is used; and the TFT structure may be a top gate (staggered type) or an inverse staggered type (col. 17, lines 35-41).

Re claims 42 and 50, Nakai discloses that TFT 407 is formed a pixel portion or a driver circuit or a memory or a microprocessor on a substrate 401 (see also Fig. 1 and col. 15, lines 26-62).

Response to Arguments

8. Applicant's arguments filed March 03, 2006 have been fully considered but they are not persuasive.

Applicant argued that Priestman does not disclose or suggest a liquid crystal display panel and an active matrix EL display device and the proposed combination of references (Nakai and Yamazaki) is improper.

In response to applicant's argument that the combination of the references is improper, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

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the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, as shown in Fig. 4, Priestman discloses a portable electronic device comprising a first liquid crystal display panel 226 and a second liquid crystal panel 220. Nakai is employed for teaching an active matrix type liquid crystal display panel for excellent display performance which is applicable to portable electronic equipment (col. 1, lines 13-20) and Yamazaki is further employed for teaching an active matrix EL display which is also applicable to the portable electronic device shown in Figs. 4A-4F (col. 5, line 5 through col. 6, line 60).

Thus, there's no reason why one having ordinary skill in the art at the time the invention cannot modify the portable electronic device of Priestman by employing the active matrix LCD of Nakai and the active matrix EL display of Yamazaki for the first and second liquid crystal display panels of Priestman in order to obtain an excellent display performance (Nakai, col. 2, lines 56-60) and also a downsized and lightened device with a low power consumption (Yamazaki, col. 6, lines 51-59).

Finally, Zavracky is employed for teaching the first display device having a high resolution for displaying text and graphics and the second display device having a lower resolution for displaying simple numeric and/or alphabetic display (paragraphs 257 and 278).

Thus, the combination of the cited prior arts suggests the claimed invention and the rejection is proper.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (571) 272-2292. The examiner can normally be reached on Monday-Friday from 8:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms, can be reached at (571) 272-1787.

Thoi Duong



05/10/2006



**DUNG T. NGUYEN
PRIMARY EXAMINER**